

IN THE CLAIMS:

Please amend claims 1 and 2 as follows. Please cancel claim 3 without prejudice or disclaimer.

1. (Currently Amended) A method for controlling data flow across a link, said method comprising the steps of:

transmitting a packet request message from a first station to a second station;

determining if the packet request message is valid;

transmitting a request acknowledge message from the second station to the first station;

determining if the request acknowledge message is valid,

wherein said step of transmitting a packet request message further comprises the step of generating the packet request message, the step of generating the packet request message comprising generating a request non-payload bit string corresponding to a pre-programmed packet request register,

wherein the packet request message and the request acknowledge message each include a control bit string, an identification bit string, and at least one parity bit, and

wherein said control bit string identifies whether a frame is a control frame or a data frame and said identification bit string correlates the packet request message with a corresponding request acknowledge message.

2. (Currently Amended) A method for controlling data flow across a link as recited in claim 1, ~~wherein said step of transmitting a packet request message further comprises the step of generating the packet request message~~, wherein said generated packet request message includes a request control code group and a request data code group.

3. (Canceled).

4. (Original) A method for controlling data flow across a link as recited in claim 2, wherein said step of generating the packet request message having a request data code group further comprises generating a request data code group bit string having at least one request parity bit and at least one request identification bit.

5. (Original) A method for controlling data flow across a link as recited in claim 4, wherein said step of generating the packet request message having at least one request parity bit further comprises generating a first request parity bit corresponding to a parity of said request control code group bit string and a second request parity bit corresponding to a parity of said request data code group.

6. (Original) A method for controlling data flow across a link as recited in claim 1, wherein said step of transmitting a request acknowledge message further comprises the step of generating the request acknowledge message, wherein the request acknowledge

message includes an acknowledge control code group and an acknowledge data code group.

7. (Original) A method for controlling data flow across a link as recited in claim 6, wherein said step of transmitting a request acknowledge message having an acknowledge control code group further comprises generating an acknowledge non-payload bit string corresponding to a pre-programmed packet acknowledge register.

8. (Original) A method for controlling data flow across a link as recited in claim 6, wherein said step of transmitting a request acknowledge message having an acknowledge data code group further comprises generating an acknowledge data bit string having at least one acknowledge parity bit and at least one acknowledge identification bit.

9. (Original) A method for controlling data flow across a link as recited in claim 8, wherein said at least one acknowledge parity bit further comprises a first acknowledge parity bit corresponding to a parity of said acknowledge control code group and a second acknowledge parity bit corresponding to a parity of said acknowledge data code group.

10. (Original) A method for controlling data flow across a link as recited in claim 1, wherein said step of determining if the packet request message is valid further comprises

determining if at least one request parity bit for the packet request message is valid and
determining if a request control code group message is valid.

11. (Original) A method for controlling data flow across a link as recited in claim 1,
wherein said step of determining if the request acknowledge message is valid further
comprises the steps of:

comparing an acknowledge identification parameter associated with the request
acknowledge message to a stored list of valid acknowledge identification parameters;

determining if an acknowledge control code group associated with the request
acknowledge message is valid; and

determining if at least one acknowledge parity parameter is satisfied.

12. (Original) A method for controlling data flow across a link as recited in claim 11,
wherein said step of determining if at least one acknowledge parity parameter is satisfied
further comprises determining if a first acknowledge parity bit associated with the
acknowledge identification parameter is satisfied and determining if a second
acknowledge parity bit associated with the acknowledge control code group is satisfied.

13. (Original) A method for controlling data flow across a link as recited in claim 1, said
method further comprising the steps of:

starting a timer upon transmitting the packet request message;

determining if a predetermined period of time has expired; and
resending the packet request message if the timer is determined to have expired.

14. (Previously Presented) A data flow control method for controlling data transmitted across a high speed link, said method comprising the steps of:

transmitting a packet request message from a first station to a second station, said packet request message having a first identification number, a first control code group, and a first parity parameter associated therewith;

storing the first identification number associated with the packet request message;

transmitting a request acknowledge message from said second station to said first station, said request acknowledge message having a second identification number, a second control group, and a second parity parameter associated therewith;

determining if the first and second control groups are valid;

determining if the second identification number matches the first identification number;

determining if the first and second parity parameters are valid;

wherein the first control group and the second control group are configured to identify whether a frame is a control frame or a data frame, and wherein the first identification number and the second identification number are configured to correlate the packet request message with a corresponding request acknowledge message.

15. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, said method further comprising the steps of:

starting a timer upon transmitting the packet request message;

determining if a predetermined period of time has expired; and

re-transmitting the packet request message if the predetermined period of time is determined to have expired.

16. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said step of transmitting a packet request message step further comprises the step of generating the packet request message, wherein said generated packet request message includes a first control group bit string, a first identification number bit string, a first parity bit corresponding to the first control group bit string, and a second parity bit corresponding to the identification number bit string.

17. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said transmitting a request acknowledge message step further comprises generating the request acknowledge message, wherein said generated request acknowledge message includes a second control group bit string, a second identification number bit string, a third parity bit corresponding to the second

control group bit string, and a fourth parity bit corresponding to the second identification number bit string.

18. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said step of determining if the second identification number matches the first identification number further comprises the steps of:

comparing the first identification number to the second identification number; and
determining if the first identification number is identical to the second identification number.

19. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said step of determining if said first and second control groups are valid further comprises the steps of:

receiving the first and second control groups in a flow logic control module; and
determining if the first and second control groups are of a valid and recognized format.

20. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said transmitting a packet request message further comprises transmitting the packet request message, wherein the first parity

parameter further comprises a request identification parity bit and a request control code group parity bit.

21. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 20, wherein said step of determining if a first parity parameter is valid further comprises the steps of determining if the request identification parity bit is valid and determining if the request control code group parity bit is valid.

22. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 21, wherein said step of determining if the request identification parity bit is valid further comprises the step of determining if the request identification parity bit represents the parity of the first identification number.

23. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 21, wherein said step of determining if the request control code group parity bit is valid further comprises the step of determining if the request control code group parity bit represents the parity of the first control code group.

24. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 14, wherein said transmitting a request acknowledge message further comprises transmitting the request acknowledge message, wherein the

second parity parameter further comprises an acknowledge identification parity bit and an acknowledge control code group parity bit.

25. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 24, wherein said step of determining if a second parity parameter is valid further comprises the steps of determining if the acknowledge identification parity bit is valid and determining if the acknowledge control code group parity bit is valid.

26. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 25, wherein said step of determining if the acknowledge identification parity bit is valid further comprises the step of determining if the acknowledge identification parity bit represents the parity of the second identification number.

27. (Original) A data flow control method for controlling data transmitted across a high speed link as recited in claim 25, wherein said step of determining if the acknowledge control code group parity bit is valid further comprises the step of determining if the acknowledge control code group parity bit represents the parity of the second control code group.

28. (Previously Presented) An apparatus for controlling data flow across a link, said apparatus comprising:

a first transmitting unit for transmitting a packet request message from a first station to a second station, said packet request message including a first identification number, a first control code group, and a first parity parameter associated therewith;

storage unit for storing the first identification number associated with the packet request message;

a second transmitting unit for transmitting a request acknowledge message from said second station to said first station, said request acknowledge message having a second identification number, a second control group, and a second parity parameter associated therewith; and

at least one flow logic unit for determining if the first and second control groups are valid, determining if the second identification number matches the first identification number, and determining if the first and second parity parameters are valid;

wherein the first control group and the second control group are configured to identify whether a frame is a control frame or a data frame, and wherein the first identification number and the second identification number are configured to correlate the packet request message with a corresponding request acknowledge message.

29. (Original) An apparatus for controlling data flow in across a link as recited in claim 28, wherein said first transmitting unit further comprises a first high speed interface of a first network switch.

30. (Original) An apparatus for controlling data flow in across a link as recited in claim 28, wherein said second transmitting unit further comprises a second high speed interface of a second network switch.

31. (Original) An apparatus for controlling data flow in across a link as recited in claim 28, wherein said storage unit further comprises a memory within said first transmitting unit.

32. (Original) An apparatus for controlling data flow in across a link as recited in claim 28, wherein said at least one flow logic unit further comprises:

a first flow control logic module, said first flow control logic module being positioned within a first network switch; and

a second flow control logic module, said second flow control logic module being positioned within a second network switch.

33. (Original) A method as recited in claim 1, wherein said step of transmitting a packet request message comprises transmitting a packet request ordered set.

34. (Original) A method as recited in claim 1, wherein said step of transmitting a request acknowledge message comprises transmitting a request acknowledge ordered set.

35. (Original) A method as recited in claim 14, wherein said step of transmitting a packet request message comprises transmitting a packet request ordered set.

36. (Original) A method as recited in claim 14, wherein said step of transmitting a request acknowledge message comprises transmitting a request acknowledge ordered set.

37. (Original) An apparatus as recited in claim 28, wherein said packet request message comprises a packet request ordered set.

38. (Original) An apparatus as recited in claim 28, wherein said request acknowledge message comprises a request acknowledge ordered set.